Impact of Digital Storytelling on Second Language Acquisition of 5th Grade Newcomer English Language Learners

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Chapter 1: Introduction

Introduction

Storytelling has been traced back to ancient times. It was a way to connect old traditions to new generations and keep cultures alive based on key principles that a society established. As technology continues to grow into a world phenomenon, so is the impact of digital storytelling on second language acquisition. As stated by the National Center for Education Statistics (NCES, 2018), "the population of English Language Learners (ELLs) in public school increased from 2 million in 1990 to 4.8 million in 2015 and by 2025, ELLS will be expected to represent a quarter of the entire student population (Capps et. al., 2005).

Being a newcomer in the United States is extremely difficult. Some schools offer board of entry programs to help students with the assimilation process. However, not all students receive this opportunity. These programs fall short when trying to help newcomers to effectively adapt to a new environment and acquire a second language (Soliman, p.6, 2020). The dramatic transformation that technology brought about in education has shown improvement in the methodology of language teaching and learning. The use of digital tools has demonstrated great impact on newcomer ELLs. Incorporating technology in the classroom "celebrates newcomers' diverse life experiences by helping them connect as a community and build valuable and diverse background knowledge" (Sienko, 2022).

Statement of the Problem

As we move more towards a more digital world, the importance of incorporating digital literacy into our every day curriculum is in high demand. Digital storytelling is a platform that supports ELL students to express and share their narratives in an engaging, hands-on and interactive way. Studies have shown that "technology facilitates ELLs opportunities to have

genuine, meaningful communication in the target language and aids in second language acquisition" (Brown, H.D, p.54, 2007). English language learners do not have equitable access to digital platforms that promote language learning. "Using computer technologies creates more variation in the classroom which leads to increasing motivation and better conditions to learn authentic and up-to-date materials in the target language" (Muhamadjonovna, 2020).

Digital storytelling will not just be able to help develop language skills but they also get to take ownership of their work and develop their socio-emotional skills through the art of expressing language and using their voice to connect their lives to the learning. "Practicing digital literacies in the classroom engages ELLs to develop as active participants who gain ownership of the learning and the command of English through connecting school literacy with their funds of knowledge" (Moll et al., 1992).

Purpose

This quantitative study aims to gain a deeper understanding on the impact that digital storytelling has on second language acquisition of fifth grade newcomer English language learners. Administrators and teachers often do not fully understand the newcomer's experience in not only adapting to the learning environment but acquiring a second language effectively. The use of digital storytelling in the classroom allows newcomers to immerse themselves in the digital experience and gain communicative competence despite their proficiency level through autonomous learning. "Computer based reading instruction also allows for increased interaction with texts, attention to individual needs, and increased independence through an ability to read texts would not otherwise be able to read (Case & Truscott, 1999). Digital storytelling is beneficial to ELLs in more ways than one.

Research Questions

The research questions that will guide the quantitative study are the following:

- **1.** What are the effects of digital storytelling on 5th grade newcomers L1 language learners on the WIDA Access assessment scores?
- 2. What are newcomers' perceptions of using digital storytelling?

Definitions

Newcomer: "Newcomer is an umbrella term that includes various categories of immigrants who are born outside of the United States. For example, all immigrants are not necessarily ELs. as some are fluent in English, while others speak little or no English. Students identified as ELs require assistance with language acquisition (though more than 40 percent of ELs are born in the United States). Some ELs may need help integrating into U.S culture. Depending on the school district, newcomers of school age who attend public school may be placed in a newcomer program or mainstreamed" (U.S Department of Education Newcomer Toolkit, 2017).

WIDA: stands for World- Class Instructional Design and Assessment. The WIDA consortium is a group of states dedicated to the design and implementation of high standards and equitable educational opportunities for English learners. South Dakota is one out of 39 states that belongs to the WIDA Consortium.

ACCESS: ACCESS for ELLs (ACCESS) is the collective name for WIDA's suite of summative English language proficiency assessments. ACCESS is taken annually by English language learners in Kindergarten through Grade 12 in WIDA Consortium member states.

Entering Level 1: Student demonstrates very little understanding of English, has limited verbal expression and relies upon visual cues, does not read or comprehend in English and has little or no ability to write in English.

Conclusion

Further exploring these questions and analyzing the data will help bridge the digital divide with English language learners especially newcomers. Reflections can bring about reform on how language learners acquire a second language and what are the steps needed to provide equal resources and access to technology. We can also further develop an in-depth understanding on the newcomer perspective on how to better serve the assimilation process into a new school environment.

Chapter 2: Literature Review

Introduction

As the world continues to push for more digital platforms, digital storytelling (DST) opportunities need to be more present in bilingual classrooms. Though technology should not replace the great things already occurring in our classrooms, evidently many studies have proven how the incorporation of technology in bilingual settings enhances and improves teaching and learning experiences when used with meaningful purpose (Nemeth & Simons, pg. 52, 2013).

While reviewing the literature, the benefits of digital storytelling were highlighted through important elements such as second language acquisition and the socio-emotional development of newcomers. Vocabulary enhancement, improved reading comprehension and engagement and speaking and listening development has been linked to the use of DST.

Moreover, the implementation of digital storytelling also generated active participation, changed attitudes towards school experience and self expression in newcomer ELLs.

Impact of Digital Storytelling

Digital storytelling is really changing the way we engage students in the classroom.

Digital storytelling releases anxiety for 5th grade newcomer English language learners. "ELLs do not have to worry about speaking the language correctly because their knowledge will be displayed on the board with written words and visuals to tell the story for them" (Cutter, p. 12, 2015). In addition, with digital storytelling "students are able to visualize and recall information at a faster and more accurate pace when words are connected to pictures" (Yildrim & Torun, p.57, 2014). Without a doubt, DST promotes both learning and more creative opportunities for language building.

The Critical Period & Second Language Acquisition

Digital Storytelling offers opportunities for 5th grade newcomer English language learners to practice their second language with peers despite the post critical period. The Critical Period Hypothesis for language acquisition is often defined as a sharp incline in learning outcomes after the age of 10" (Chiswick & Miller, 2008, p.16). Studies have shown that children absorb a second language better than later learners due to intellectual brain development of a child (Atma et al. 2020). Moreover, Vanhove (2013), further explained that in "the long term and through immersive delving, second language learners who start acquiring a language earlier in life, for example, developing L3 learners, and continue to be exposed to the language and its will most certainly outperform later learners (L1, newcomers). As a result, digital tools like digital storytelling serve as an essential tool that aids in bridging the language gap that exists in multilevel bilingual classrooms. It stands to reason that the impact of DST on second language acquisition needs to be further explored with the 5th grade newcomer ELL population. "When students are learning a new language, it is fundamental to use pictures. Pictures are appealing to the eye and catch student's attention, making lessons memorable and motivating for struggling learners (Cutter, p. 12, 2015). Nevertheless researchers also gather that "older children may consider themselves too old to be reading such primary content books... Technology programs such as DST however, can increase the interest level for older students while keeping the text simple and easy to read providing immediate feedback on performance and added practice when necessary" (Ybarra & Green, 2003). Needless to say, digital storytelling allows students to establish interest, become up to date with digital literacy and engage in a fun and interactive way preparing them to participate in a global technology economy in the 21st century.

Socio Emotional Development

Consequently, the impact of digital storytelling in second language acquisition empowers newcomer students. As Lev Vygotsky's Constructivist theory (1978) would state, "social engagement provides the most effective and appropriate context for curriculum learning to take place" (Gibbons, p. 22, 2006). This sociocultural perspective demonstrates the importance of digital storytelling in language acquisition for newcomer ELLs. "Digital literacy functions as a key component of authentic ELL participation in the academic inquiry and writing process" (Yuan, C et al 2019).

Digital Storytelling can also strengthen relationships in the school community. When allowing Newcomers to create and share their authentic power stories, we ignite students' passion and motivation in the content and in self expression. "Digital spaces can also be a source of social empowerment for ELL's...creating sharing digital content can encourage students to develop a greater sense of pride in their work" (Yuan, C. et al 2019). Regardless of the many challenges newcomers face assimilating into a new school environment, digital storytelling can support newcomers now only gaining digital literacy but also facilitate second language learning and build their self-confidence.

Summary

The literature review thoroughly demonstrates the many benefits of incorporating digital storytelling. DST has proven to foster language acquisition and active participation in ELLs. It is imperative that newcomers have supports that allow them to assimilate into a new school environment. Although DST has shown its advantages on language acquisition and socio-emotional development, the digital gap between ELL is still wider than ever due to the pandemic. Much research remains to be done on the positive effects of DST on newcomer ELLS.

The question, however, is whether educational stakeholders are prepared to let go of their preconceived social construct on newcomer ELL abilities in order to provide them with equitable access to participate in a global technological economy and prepare them to become effective and competent digital natives in this digital era that we are currently living in.

Chapter 3: Methodology

Introduction

Digital storytelling studies have proven to be beneficial with English language learners. The implementation of digital storytelling is not only instrumental in engaging students in learning but as an effective tool in measuring the development of language acquisition with newcomer ELLs. "Use of online software for digital storytelling was positively associated with higher reading-writing English test scores because it allows students to continuously collaborate, to work through arising challenges that may present when creating content…DST provides ease in peer-sharing instead of working in isolation" (Rahimi & Yadollahi, 2017).

This quantitative study will determine if there is any relationship between digital storytelling and second language acquisition and student socio-emotional development. This study's focuses on these essential questions: What are the effects of digital storytelling on 5th grade newcomers L1 language learners on the WIDA Access assessment scores? What are newcomers' perceptions of using digital storytelling?

Research Design

A correlation research design will be implemented in this quantitative study to identify, analyze and anticipate any correlation between digital storytelling to second language acquisition and student engagement. Correlational studies are used to predict relationships between variables (Creswell & Guetterman, 2019). The two variables in this study are second language acquisition and student engagement. The purpose of this quantitative research is to utilize the statistical findings from the survey to reveal if there is a link between digital storytelling, student engagement and second language acquisition through newcomers WIDA ACCESS assessments scores. A cross-sectional survey will be implemented in the study to gather data from the

newcomer population of 5th grade newcomer students. The cross-sectional survey will be distributed online with both parent and student consent. This method provides an easy and smooth collection of data (Creswell & Guetterman, 2018).

The researcher will compare the WIDA ACCESS test scores in two different bilingual classrooms, one that used digital storytelling regularly and one that did not and followed traditional curriculum with little to no technology. This method aids in gaining an in-depth understanding if there were any relationships between the success of newcomer ELLs from either school and how it affects student engagement.

The survey will be administered to students in the two participating schools in Passaic, NJ to have a better understanding of the impact technology has in language acquisition beyond test scores. The survey will focus on newcomer's perception of digital storytelling, general attitudes and motivation in acquiring a second language and if the digital tool facilitated language acquisition. The nature of this bilingual survey will help the researcher compare the two groups based on the effect in the use of technology in bilingual classroom settings.

Population and Sample

The population chosen for this research is 5th grade newcomer English language learners in bilingual at two different classroom settings in Passaic, New Jersey. Convenience sampling will be utilized in this study on a basis of participants convenience and availability (Creswell & Guetterman, 2018). The bilingual survey will be distributed through google forms. Online sampling will be used in order to have a safer collection of data. The Passaic Board of Education along with the Bilingual department director will grant access to the student information for this research study. WIDA Access scores will be compared between both groups to determine the

impact DST made on their language acquisition development in listening, reading, writing and speaking and classroom engagement.

Instrument

The instrument implemented in this quantitative research study is a survey created in and distributed using Google Forms for a safe and faster collection of data. Google Forms is a free software used by administrators that Google offers as a web application. The Google form will be shared via a link and shared with students via school email after I have received signed consent from both parents and students. The data gathered through the use of a spreadsheet to make sure there are no data entry issues. The completed forms will be thoroughly analyzed and illustrated on charts and graphs as visual representation.

Procedure

This quantitative research study will require the permission of New Jersey City

University and Passaic Public Schools superintendent, Sandra Montanez-Diodonet. After being approved, the consent form will be distributed to parents and students in both Spanish and English via Google Forms. This quantitative study will begin during the incorporation of digital storytelling in the creation of newcomer's personal narratives during the first period of writer's workshop. To engage in communication, the researcher will join in on the student process navigating digital literacies with digital storytelling.

The focus of the study will be to determine how digital storytelling helps students share their stories and how it influences second language acquisition and student engagement. Last, research will analyze the relationship between WIDA Access assessment score to digital

storytelling and measure how students attitudes changed on language acquisition and participation in whole group presentations through student survey responses.

The bilingual student survey will first be reviewed by the superintendent. Once approved, the Bilingual department director, Dr. Gloria Vargas will be contacted to request a list of ELL participants along with their email address and their WIDA Access of score of the previous academic school year. Bilingual parent and student consent forms will be sent out via student email address as soon as the two groups are approved by the bilingual department. After receiving consent, bilingual student surveys will also be distributed via student email address.

The anticipated time allotted for the collection of data will be approximately two weeks followed by a reminder after the first week. Fifth grade newcomer students will be given approximately 6 weeks with a reminder on the third week via email in regards to the completion of the survey. Full participation will be expected from the two groups of 5th grade newcomer ELL students. Once the bilingual student surveys are completed and received, the reports will be implemented through the use of Google Forms application in order to organize and analyze the quantitative data for the research study.

The WIDA ACCESS test score from the previous year will also be compared to this year's WIDA ACCESS assessment. These test scores will also be included in the data analysis along with the survey data. These two types of data gathered will help determine if there was a relationship between the success of students in the two different groups based on the implementation of digital storytelling. The data result of the student survey will also give great insight on the importance of using digital tools in engaging students especially newcomers in acquiring a second language.

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Appendix A

Demographics: What is the name of your school? What grade are you in? When did you arrive in the United States?

Indicate how much you agree with the following/ Indica cuanto estas de acuerdo con lo siguiente:

	Agree De Acuerdo	Neutral Neutral	Disagree En Desacuerdo	Not Applicable No me Aplica
	3	2	1	0
Digital storytelling has given me opportunities to strengthen my English vocabulary				
La narración digital me ha brindado oportunidades para fortalecer mi vocabulario en inglés.				
Digital storytelling has allowed me to practice my English through peer discussion and group projects				
La narración digital me ha permitido				
practicar mi inglés a través de discusiones				
entre compañeros de clases y proyectos en				
grupos				
Digital storytelling helped me feel confident in expressing myself and participating in class				
La narración digital me ayudó a sentirme				
seguro para expresarme y participar en				
clase				
Digital storytelling gives me opportunities to share my story in a fun and interactive way				
La narración digital me brinda la				
oportunidad de compartir mi historia de				
una manera divertida e interactiva				
Digital storytelling will benefit all ELL students in Passaic, NJ				
La narración digital beneficiará a todos				
los estudiantes ELL en Passaic, NJ				

Appendix B

July 11, 2022

Dear Dr. Gloria Vargas,

I am your 4th & 5th bilingual teacher at Daniel F. Ryan School 19 and a doctoral student in the Educational Technology Leadership program at New Jersey City University. There has been an increased interest in researching the impact on implementation of digital storytelling into bilingual classrooms. I am seeking your permission to conduct a study with two bilingual 5th grade classrooms in two different school settings within our district. The study aims to identify the relationship between digital storytelling and the impact on second language acquisition and student engagement and improvement on English language learner's WIDA Access assessment scores.

Student participation in this study is completely anonymous and voluntary. I would be in need of a list of two 5th grade bilingual classrooms to distribute the survey. I will include the student recruitment email that will be sent to invite students to participate and the Survey Link below.

Please feel free to contact me with any concerns or questions via phone or email.

Sincerely,

Melissa Garcia
4th & 5th grade Bilingual Teacher
Daniel F. Ryan Elementary #19
megarcia@passaicschools.org
(917) 736-7253

Appendix C

11 de Julio del 2022

Estimados Padres/Guardianes,

El departamento bilingüe de las escuelas públicas de Passaic está implementando un programa digital de historias. Ha habido un incremento e interés en estudios con respeto a la implementación de narración digital en las aulas bilingües. Como resultado, estaré realizando un estudio, que tiene como objetivo identificar la relación entre narración digital y el impacto que tiene en la educación bilingüe, el punto de calificaciones en los examenes de ingles, y las actitudes hacia la narracion digital.

La participación en este estudio es voluntaria y anónima. Al considerar la encuesta, usted acepta el uso de su respuesta en el estudio. Completar esta encuesta solo le tomará 5 a 10 minutos de su tiempo y debe completarla antes del 15 de abril del 2024.

Si tiene alguna pregunta o duda, no dude de ponerse en contacto conmigo por correo electrónico o por teléfono.

Sinceramente,

Melissa Garcia

Daniel F. Ryan School 19

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Tel: 917-736-7253